Kentucky
Epidemiologic Notes & Reports

Cabinet for Health Services
Department for Public Health
Division of Epidemiology & Health Planning

Volume 38 Number 2 February 2003

U.S. Syphilis Rate Rises for First Time Since 1990

Despite continued declines among African Americans and women of all races, overall rates of primary and secondary syphilis have increased slightly for the first time in more than a decade, according to a report from the Centers for Disease Control and Prevention (CDC).

The report, published in the November 1 issue of CDC's *Morbidity and Mortality Weekly Report*, found that cases of primary and secondary syphilis in the United States rose by 2% between 2000 and 2001 (5,979 cases in 2000 to 6,103 cases in 2001). The overall syphilis rate in the U.S. increased from 2.1 per 100,000 people to 2.2 per 100,000 people, the first such increase since 1990.

The report attributed the slight increase to syphilis diagnoses among men. Syphilis rates among U.S. men rose by 15.4% between 2000 and 2001, an increase that coincided with outbreaks among men who have sex with men (including bisexual men) in several U.S. cities.

These increases contrast with significant and sustained progress in syphilis elimination in populations and areas where syphilis rates are highest—among African Americans and individuals living in the South. Syphilis cases among African Americans declined by 9.9% between 2000 and 2001 (3.5% and 18.1% among African-American men and women, respectively). Additionally, although the South continues to have the largest proportion of syphilis cases (56% of total U.S. cases), there was an 8% decline in syphilis rates in this region. Syphilis cases among women overall declined by 19.5%. These declines were consistent with those noted every year since CDC began syphilis elimination efforts in 1998, targeting groups and regions at highest risk.

New Challenges

CDC officials said that increases in syphilis among men who have sex with men of all races pose new challenges to U.S. efforts to eliminate the disease. Syphilis cases among white and Latino men increased by 63% and 50%, respectively, from 2000 to 2001. Additionally, although African-American men were the only men in any racial or ethnic group to experience a decline (3.5% decline), the change represents a significant slowing in the large decline reported the previous year (15% decline from 1999 to 2000).

The report indicates that the increases seen among men are associated with recent syphilis outbreaks among men who have sex with men of all races and highlights outbreaks reported in Chicago, Los Angeles, New York City, San Francisco, Seattle, and Miami.

Health officials said that because the risk behaviors for syphilis and HIV are similar, and because syphilis lesions increase risk of HIV transmission between two and five times, outbreaks among men who have sex with men could also signal a potential increase in HIV transmission.

Local Data

The CDC report also highlighted syphilis trends among counties across the U.S. The report found that half of the nation's syphilis cases were concentrated in 20 counties and one independent city. Overall, 80% of all U.S. counties did not report a single case of primary or secondary syphilis in 2001. Despite the increase in syphilis cases among men who have sex with men, CDC officials said that the national goal of eliminating syphilis by 2005 (defined as 90% of counties syphilis-free) remains in effect.

Jefferson County experienced a dramatic rise in early syphilis cases during 2002. See Page 2 for current data on Jefferson County and the Commonwealth of Kentucky.

February Notes & Reports.....

Infectious and Early Syphilis Reports

Infectious and Early Syphilis Reports
Jefferson County, Kentucky
2001 vs. 2002

Time	# Cases	Rate per 100,000
Infectious Cases (P/S)		
JAN-DEC 2001	19	2.73
JAN-DEC 2002	77	11.10
Early Latent Cases (EL)		
JAN-DEC 2001	20	2.88
JAN-DEC 2002	33	4.80
Total Early Cases (PS/EL)		
JAN-DEC 2001	39	5.62
JAN-OCT 2002	110	15.90

Syphilis Case Facts
Jefferson County, Kentucky
2002

110 Early (Primary, Secondary, and Early Latent) Cases, Jefferson County, JAN-DEC 2002

- 75 patients were African American; 33 were white; 2 were other minorities
- 18 patients were found through screening at jail
- 14 were women who traded sex for drugs or money
- 6 females were pregnant at time of diagnosis and treatment
- 17 patients reported crack cocaine use
- 19 patients were men who have sex with men

Early Syphilis Reports
Kentucky and Jefferson County
2002

Cases	Kentucky	Jefferson County
Primary	29	25
Secondary	59	52
EL	49	33
Total	137	110

Percentage of Early Syphilis increase in 2002:

Number of statewide cases rose from 86 in 2001 to 137 in 2002 for an increase of 59%.

Number of Jefferson County cases grew from 39 in 2001 to 110 in 2002 for an increase of 182%.

—Data compiled by Dave Raines, BA Manager, Kentucky STD/HIVCT Program.

Annual Influenza Deaths in U.S. Higher Than Previously Estimated

New data indicate that the estimated number of persons who die each year from influenza and respiratory syncytial virus (RSV) in the United States is substantially higher than previous estimates.

Using new statistical models, Centers for Disease Control scientists estimate that an average of 36,000 people (up from 20,000 in earlier estimates) die from influenza related complications each year. In addition, about 11,000 people die annually from respiratory syncytial virus (RSV), a virus that causes upper and lower respiratory tract infections primarily in young children and older adults. The study demonstrates that most deaths caused by RSV occur in the elderly.

CDC researchers believe that the increase can be explained in part by the aging of the U.S population. Over the past several decades, the number of persons aged 85 or older has doubled. Also, the most virulent of influenza viruses in recent years, influenza A (H3N2), has been the most common strain circulating during the last decade.

The influenza study also points out that research is needed to develop better vaccines that are more protective in the elderly and RSV vaccines that are effective in both young children and elderly persons.

Vaccinating individuals who are at greatest risk of serious complications from influenza will continue to be the the nation's primary strategy for preventing influenza associated deaths.

The CDC recommends influenza vaccination for those at high risk for complications from influenza, including individuals aged 65 and older and others with chronic medical conditions, such as heart and lung disease and diabetes, as well as health care workers. All other groups, including household members of high-risk persons, healthy people ages 50-64, and others who wish to decrease their risk of getting influenza should begin receiving vaccinations each November. CDC also encourages children aged 6 months to 23 months to receive influenza vaccinations.

The new influenza data were published in the January 8 issue of the *Journal of the American Medical Association (JAMA)*. For more information on influenza, go to: http://www.cdc.gov/ncidod/diseases/flu/fluvirus.htm.

Women and Heart Attacks

By Tricia Williams, MPA, Health Policy Development Branch

Cardiovascular disease, or heart disease, kills more women in the United States and in Kentucky than any other disease or condition[1]. In 2000, 6,293 women in Kentucky died from heart disease.[2] Heart attack (myocardial infarction), a form of heart disease, accounted for 13,925 hospitalizations in Kentucky in 2001. Of those, 41.6% were women.[3] (Table 1.)

Heart Attack Hospitalizations, Kentucky, 2001[3]

Women	**5,793**	**41.6%**
Men	**8,132**	**58.4%**
Total	**13,925**	**100%**

Table 1

Heart Attack May Be Misdiagnosed in Women

In some cases, women do not report the typical symptoms of a heart attack and may be misdiagnosed. About 2% of women with a heart attack or unstable angina may not have chest pain or other typical symptoms. If misdiagnosed, women may be sent home where they are twice as likely to die from the heart attack than if they were hospitalized. These women are most likely under age 55 or minorities, who report shortness of breath instead of the typical symptoms and have normal ECGs.[4]

More Women Die While Hospitalized for Heart Attack

Although Kentucky data shows that more men were hospitalized in 2001 for heart attacks than women, more women died as a result of the heart attack while in the hospital. Almost 10% of female heart attack victims died while at the hospital as opposed to a 6.4% of men.[3] (Table 2.)

Heart Attack Victims Who Die in Hospital Kentucky, 2001[3]

Women	**572**	**9.9%**
Men	**520**	**6.4%**
Total	**1,091**	**7.8%**

Table 2

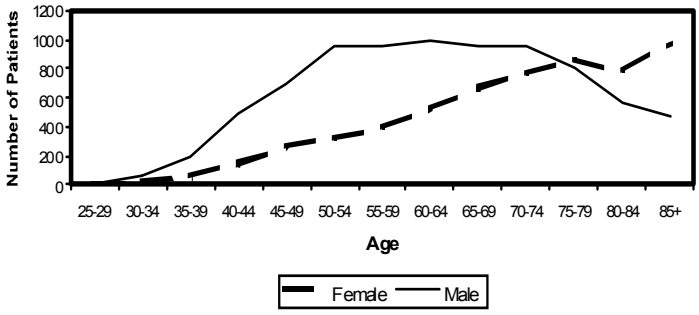
The difference in age of female patients versus male patients may explain these findings.

Heart Attacks Occur Later in Life for Women

Women typically suffer a heart attack later in life than their male counterparts. In 2000, the average male heart attack victim hospitalized in Kentucky was 63.5 years of age, while the average female was 71.5. Almost 42% of male victims were under age 60; only 21% of female victims were under 60.[3]

Figure 1 shows the number of hospitalizations in Kentucky for heart attack. According to the graph, males begin experiencing heart attacks more frequently around age 30. The number of female heart attack patients does not dramatically increase until after age 40 and increases at a slower rate than males. After age 75, there are more female patients than male patients; however, males continue to have heart attacks at a higher rate than females. The female heart attack rate was 28.03 hospitalized per 1,000 females in 2001 while the male rate was 41.16 per 1,000 males. [3,5]

Figure 1: Heart Attack Hospitalizations, Kentucky 2001



Heart Attack Risk After Menopause

The risk of heart attack for women increases after menopause and continues to rise as they age. After menopause, women tend to have more risk factors, including higher levels of triglycerides, cholesterol, and low-density lipoprotein (LDL). It was previously thought that the decrease in estrogen contributed to the increased risk. However, recent studies have questioned the benefit of postmenopausal estrogen therapy or hormone therapy in reducing the risk of cardiovascular diseases. The American Heart Association now recommends that women do not start or continue hormone replacement therapy exclusively to prevent heart disease or stroke.[6]

(Continued on Page 4)

Women and Heart Attacks

(Continued from Page 3)

Treatment for Heart Attacks May Differ for Women

A recently published study found that treatment of patients suffering heart attacks may differ based on gender. Coronary angiography, a procedure used to diagnose the extent of damage to the heart, is less likely to be done on a female patient than on a male patient. In addition, women are less likely to undergo coronary bypass surgery after suffering a heart attack than men. The study found that age and illness severity did not explain the differences in treatment. [7] Previous studies also have shown that cardiac procedures are performed less frequently on women than on men.[7]

When Entering the Hospital…

Emergency care is essential to surviving a heart attack. In a 1993 study, the death rate for people experiencing a heart attack who were treated within 70 minutes of onset of symptoms was 1.3%. For those who received treatment after more than 70 minutes of onset, the death rate rose to 8.7%[8]

The majority of women who had heart attacks (57.1%) were admitted to the hospital through the emergency room. This varies slightly when compared to male heart attack admissions where just over half (51.1%) were admitted through the emergency room. Another 23.9% of women were sent to the hospital by a physician.

Interestingly, a higher percentage of men were transferred from another hospital for care than women. Only 15% of female heart attack victims were transferred from another hospital, while 20.2% of men were transferred. It is assumed that these patients were transferred because they required a higher level of care than was available at the hospital where they were originally treated for the episode. The cause of this difference is unclear from this data. Since women die from heart attacks in the hospital at a higher rate than males, the opportunity to transfer them to a higher level of care many be decreased. In addition, the difference in the average age of a female heart attack victim and a male victim may influence the need to transfer the patient to a higher level of care. Severity of illness and other existing complications/co-morbidities also play a role in this decision. However, data have shown that women receive different treatment than men for heart attacks and experience different symptoms. There may be a difference in the perception of the need to transfer them to a higher level of care. Further research is necessary to determine the factors influencing these differences.

When Leaving the Hospital…

There is a large difference in the discharge status of men and women once they leave the hospital after a heart attack. Ten percent more males are discharged to their home/self-care than women. However, 6% more women than men go to a skilled nursing facility and 3.5% more women die before leaving the hospital. In addition, 2.5% more women receive home health care after leaving the hospital. These differences are largely explained by the age difference between male and female patients. It is assumed that since the female patients are older, they will require more continued care after leaving the hospital through skilled nursing facilities and home health services. They also may be less likely to have someone in their home to care for them after the event.

Who Pays for the Hospital Visit?

Over 68% of hospitalized female heart attack victims received Medicare, compared to 50.9% of men. Since these women were typically older than their male counterparts, this result is expected. Also related to the age difference between men and women victims, is a large difference between the percentage of women and men covered under a private insurance plan. Only 18.87% of the women hospitalized for a heart attack were covered by private insurance, as opposed to 30.38% of men. The higher number of women covered by Medicare likely explains this difference. A slightly higher percentage of men (3.78%) than women (2.38%) had no insurance coverage for their hospitalization.

Summary

It has been known for some time that there are many differences in the health care needs of women and men. Historically, heart disease has been thought of as a man's disease and its presence has been discounted in women. Research has been conducted on male patients and findings of these studies used to treat females. As more research is undertaken specifically targeting females and heart disease, more is learned about these differences.

Women present different symptoms of heart attack than males, they are older when the attacks occur and have gender specific issues that affect their risk and outcomes. They also may receive different medical treatment than men. Research on women with this condition should continue in order to fully understand these differences and to determine appropriate treatment for the female patient.

(Continued on Page 5)

Cases of Selected Reportable Diseases in Kentucky
(YTD Through December for Each Year)

Disease	2002	2001	5 year median
AIDS	267	312	272
Chlamydia	8756	8881	8063
Gonorrhea	3772	3589	3589
Syphilis (Prim. and Sec.)	88	49	88
Group A Streptococcus	21	39	24
Meningococcal Infections	16	26	26
Haemophilus influenzae, invasive	7	2	7
Hepatitis A	43	144	63
Hepatitis B	61	63	61
E. coli O157H7	31	65	40
Salmonella	415	407	407
Shigella	211	844	235
Tuberculosis	137	152	152
Animal Rabies	28	30	30
Motor Vehicle Injury Deaths	901	847	847

Vaccine Preventable	2002	2001
Diphtheria	0	0
Measles	0	2
Mumps	3	3
Pertussis	97	96
Polio	0	0
Rubella	0	0
Streptococcus pneumoniae	18	28
Tetanus	0	0

Vector-Borne	2002	2001
Rocky Mountain Spotted Fever	5	2
Lyme Disease	24	23
Ehrlichiosis	2	2
Tularemia	2	4
Arboviral Encephalitis	44	0
Malaria	8	14

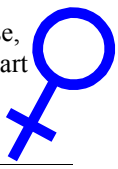
Women and Heart Attacks

(Continued from Page 4)

Clearly, heart disease is a serious health concern for the female population. Women need to be more educated on the risks, symptoms, and prevention of this condition. A study prepared on behalf of the American Heart Association found that less than 30% of physicians discussed heart disease with their female patients. Many women are unaware of the risks heart

References

1. American Heart Association web site www.americanheart.org/statistics/cvd.html October 10, 2001.
2. Kentucky Death Certificate File, 2000.
3. 2001 Kentucky Hospital Discharge Data. Health Policy Development Branch, Kentucky Department for Public Health.
4. Pope, Aufderheide, Ruthazer, et al. New England Journal of Medicine 2000; 342(16): 1163-70.
5. 2000 US Census Data. Kentucky State Data Center website. cbpa.louisville.edu/ksdc/. January 7, 2003.
6. American Heart Association web site. Media Advisory 7/09/2002. www.americanheart.org/presenter.jhtml?identifier=3003700. January 3, 2003.
7 Iezzoni, L.I., Ash, A.S., Shwartz, M., Mackiernan, Y.D. "Differences in procedure use, in-hospital mortality, and illness severity by gender for acute myocardial infarction patients". Medical Care 35(2), pp. 158-171, 1997.
8. Faxon, D., Lenfant, C. Timing is Everything: Motivating Patients to Call 9-1-1 at Onset of Acute Myocardial Infarction. Circulation, 2001; 104: 1210.
9. Yankelovich Partners Inc. "Women and Heart Disease, A Study of Women's Awareness of Attitudes Towards Heart Disease and Stroke". August 1997.



KENTUCKY EPIDEMIOLOGIC NOTES & REPORTS
Printed With State Funds
by the
Commonwealth of Kentucky
Cabinet for Health Services
Department for Public Health
275 East Main Street
Frankfort, Kentucky 40621

Kentucky Epidemiologic Notes and Reports, a monthly publication, is available without charge to subscribers. Although materials may be reproduced without permission, we appreciate acknowledgement. For more information call 502-564-3418. Visit our Website: http://publichealth.state.ky.us/newsletters pub.htm

Rice C. Leach, MD,
Commissioner, Department for Public Health
Steven J. Englender, MD, MPH,
State Epidemiologist and Director,
Division of Epidemiology and Health Planning
Molly M. Cone, Editor

RETURN SERVICE REQUESTED

PRSRT STD
U.S. Postage Paid
Lexington, KY
Permit No. 1

American Heart Month—2003

"Get Hands on and Help Save a Life" is the theme of the American Heart Association's 2003 American Heart Month in February. This year's observance emphasizes a hands-on approach to fighting heart disease by promoting widespread training in CPR and supporting automated external defibrillator (AED) programs

Kentucky Women & Heart Disease Risk Factors

Data show that Kentucky women have significant behavioral risk when it comes to heart disease. Some actions that can reduce that risk are[1]:

Do not smoke. Smokers' risk of heart attack is more than twice that of nonsmokers. Cigarette smoking is the biggest risk factor for sudden cardiac death; smokers have two to four times the risk of nonsmokers. In 2000, 27.9% of Kentucky women smoked.[2]

Keep cholesterol levels in check.

Manage high blood pressure. Hypertension can be controlled through diet and medication. In 1999, 30.1% of Kentucky women had high blood pressure. [2]

Exercise regularly. Exercise can help control blood cholesterol, diabetes, and obesity, as well as help lower blood pressure in some people. In 2000, 42.1% of Kentucky women lacked any type of physical activity.[2]

Manage body weight. People who have excess body fat, especially if a lot of it is in the waist area, are more likely to develop heart disease even if they have no other risk factors. Excess weight increases the strain on the heart, raises blood pressure, blood cholesterol and triglyceride levels, and lowers HDL ("good") cholesterol levels. In 2000 53.4% of Kentucky women were overweight. [2]

Control diabetes. Even when glucose levels are under control, diabetes greatly increases the risk of heart disease. About two-thirds of people with diabetes die of some form of heart or blood vessel disease. In 2000, 6.1% of Kentucky women had been told by a doctor that they have diabetes.[2]

—Tricia Williams

References

1. American Heart Association web site www.americanheart.org/statistics/cvd.html October 10, 2001.
2. Kentucky Behavioral Risk Factor Surveillance System 2000 Report. Kentucky Department for Public Health.